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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/488,448	01/20/2000	Yasuhiro Ootori	SCEI 16.907	4460

7590 03/27/2002
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EXAMINER

CUEVAS, PEDRO J

ART UNIT PAPER NUMBER

2834

DATE MAILED: 03/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/488,448

Applicant(s)

OOTORI, YASUHIRO

Examiner

Pedro J. Cuevas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 04 December 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 6,004,134 to Marcus et al.

Marcus et al. clearly teaches the construction of a control unit (10) that includes electric motors (30, 32). Both motors are shown with a housing (container), which inherently accommodate a magnetic substance (rotor or stator), a rotation member and a magnetic field generation means to generate a magnetic field inside the container.

3. With regards to claim 9, Marcus et al. discloses the claimed invention in which the magnetic field generation means is located inside electric motors (30, 32), as shown in Figures 5 and 6. It is inherent that the motors include an electromagnet.

4. With regards to claim 12, Marcus et al. discloses a magnetic member, which rotate based on an input operation of a input operation unit (10) as shown in Figures 3 & 5, and a magnetic field generation means, which generate a magnetic field toward the magnetic member according to game information.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No 6,004,134 to Marcus et al. in view of U.S. Patent No. 4,565,108 to Makita.

Marcus et al. clearly teaches the construction of a control unit as described above.

Makita teaches the construction of:

a magnetic powder clutch as shown in Figure 1., with an electro-magnetic powder clutch (1) in which a rotation member (9) is arranged in a state in which part of a peripheral edge is immersed in the magnetic substance, which can be a magnetic powder (as claimed in claim 7), when there is no magnetic field for the purpose of gradually engaging the drive plate (5) to the system (2);

a rotation member (9), which is arranged in a state in which all of one side is immersed in the magnetic substance, when there is no magnetic field for the purpose of gradually engaging the drive plate (5) to the system (2);

a rotation member (9), which has an accommodation part (10) to accommodate the magnetic substance, when a magnetic field is produced for the purpose of gradually engaging the drive plate (5) to the system (2); and

a container (11) with a space isolated from rotation member (9), to collect the magnetic substance when a magnetic field is generated for the purpose of gradually de-engage the drive plate (5) to the system (2).

It would have been obvious to one skilled in the art at the time the invention was made to use the electro-magnetic powder clutch (1) disclosed by Makita on the resistance force generator disclosed by Marcus et al. for the purpose of magnetically coupling the magnetic substance (stator) with the rotation member (38, 40) and gradually engaging or de-engaging the drive plate (5) to the system (2).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 6,004,134 to Marcus et al. in view of U.S. Patent No. 4,611,697 to Okita et al.

Marcus et al. clearly teaches the construction of a control unit as described above.

However it fails to disclose a rotation member made of a nonmagnetic substance.

Okita et al. teaches the construction of an electromagnetic coupling in which the output shaft (14) has mounted on the end within the space in the first rotary member (2) a pair of rim elements (20, 22) of a magnetic material. These rim elements and output shaft (14) constitute a rotary member (4), which inherently is of a nonmagnetic substance, for the purpose of forming an annular cavity between the rim elements (20, 22) and rotary member (4).

It would have been obvious to one skilled in the art at the time the invention was made to use the rotary member disclosed by Okita et al. on the resistance force generator disclosed by Marcus et al. for the purpose of forming an annular nonmagnetic cavity between the rim elements (20, 22) and rotary member (4).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 6,004,134 to Marcus et al. in view of U.S. Patent No. 5,628,267 to Hoshio et al.

Marcus et al. clearly teaches the construction of a control unit as described above.

However it fails to disclose a rotation member (38, 40), which includes rotating vanes (11, 42 and 51) for the purpose of balancing the rotational speed of the spin shaft (12a), by the losses caused by it's resistance to rotation.

Hoshio et al. teaches the construction of a oscillation suppression device with a rotation member (12a) which includes rotating vanes (11, 42 and 51) for the purpose of balancing the rotational speed of the spin shaft (12a), by the losses caused by it's resistance to rotation.

It would have been obvious to one skilled in the art at the time the invention was made to use the rotation member (12a) which includes rotating vanes (11, 42 and 51) disclosed by Hoshio et al. on the resistance force generator disclosed by Marcus et al. for the purpose of balancing the rotational speed of the spin shaft (12a).

9. Claims 8, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 6,004,134 to Marcus et al. in view of U.S. Patent No. 3,305,055 to C.S. Slaughter.

Marcus et al. clearly teaches the construction of a control unit as described above.

However it fails to disclose a control unit containing a magnetic fluid as the substance, as stated in claim 8, and a rotation member that collects a magnetic substance on an entire region when a magnetic field is generated, as stated in claim 10.

C.S. Slaughter teaches the construction of a fluid particle coupling, which has a thin low inertia disc (11) positioned to rotate in a container (13) filled loosely with a fluid powder (14) for the purpose of acting as a low viscosity cloud during rotation of the disc (11).

It would have been obvious to one skilled in the art at the time the invention was made to use fluid particle coupling disclosed by C.S. Slaughter on the resistance force generator disclosed

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by Marcus et al. for the purpose of acting as a low viscosity cloud during rotation of the disc (11).

10. With regards to claim 13, Marcus et al. in view of C.S. Slaughter disclose a resistance force generator wherein the rotation member is provided inside the container in contact with at least part of the magnetic substance and operationally connected with the input operation unit to rotate based on an input operation of the unit; and the magnetic field generation means generates a magnetic field to make displacement of the magnetic substance inside the container in accordance with game information, whereby the resistance force corresponding to the input operation is varied in accordance with game information.

11. With regards to claim 14, Marcus et al. in view of C.S. Slaughter disclose a resistance force generator wherein the magnetic member which is operationally connected with the input operation unit to rotate based on an input operation of the unit; and the magnetic field generation means generates a magnetic field toward the magnetic member in accordance with game information, whereby the resistance for corresponding to the input operation is varied in accordance with game information.

Response to Arguments

12. Applicant's arguments filed on December 4, 2001 have been fully considered but they are not persuasive.

13. In response to applicant's argument that the Marcus patent does not disclose, teach or otherwise suggest "a magnetic substance" nor "a magnetic field generation means which generates a magnetic field ... in accordance with game information"; it must be noted that a common magnet or any ferromagnetic material capable of being magnetized, is in fact "a

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magnetic substance” as defined by The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company, and that a motor or generator as a whole unit must have within its structure “a magnetic field generation means” either a permanent magnet or an electromagnet for it to actually work, using or generating electricity. In the particular case of the Marcus patent, the motors create resistance force over the joystick according to game instructions.

14. In response to applicant's argument that there is no suggestion to combine the references (Marcus and Makita), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the examiner combined the Makita teachings of using “a magnetic powder” to vary the amount of friction or resistance over a piece of the “gearshift apparatus for an automobile” for which it was designed to be used. The intended use of the Makita invention was not the reason or suggestion to combine the references.

15. In response to applicant's argument that there is no suggestion to combine the references (Marcus and Okita), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re*

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Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the examiner combined the Okita teachings of using the “cooling fins” of an electromagnetic powder coupling device. The intended use of the Okita invention is not the reason or suggestion to combine the references.

16. In response to applicant's argument that there is no suggestion to combine the references (Marcus and Hoshio), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the examiner combined the Hoshio teachings of using the “rotating vanes” of an oscillation suppression device. The intended use of the Hoshio invention is not the reason or suggestion to combine the references.

17. In response to applicant's argument that there is no suggestion to combine the references (Marcus and Slaughter), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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In this case, the examiner combined the Slaughter teachings of using the “magnetic fluid” as the substance, and “a rotation member” that collects a magnetic substance on an entire region when a magnetic field is generated of a fluid particle coupling. The intended use of the Slaughter invention is not the reason or suggestion to combine the references.

18. In response to applicant's argument that the claimed resistance force generator is built for use in a game machine, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form PTO-892.

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Néstor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
March 20, 2002


BURTON S. MULLINS
PRIMARY EXAMINER